



With a few, simple steps we will populate a spreadsheet that will get Roadway about 70 to 80% of what they need to fill out the Drainage Summary Sheet. That includes the structure numbers, locations (stations, offsets, and alignments), and elevations (tops and inverts). Also reported are pipe sizes and materials, and what boxes and grates are being used.

You will need an up-to-date Hydraulics workspace, and at least Excel 2007.

Geopak Drainage will make your life and Roadway's much easier as far as the Drainage Summary Sheet is concerned. On everything else all bets are off.

Step Summary

1. Design the project using Geopak Drainage as much as you can. Do not use it for driveway pipes.
2. Run PayItem Utility V1 or V2. (Use V1 if you did not use Payitem Override to select your specific pipe types. Use V2 if you did. V2 is nicer.)
3. Run the Station and Offset VBA (SOAP) on the project.
 - a. If you have to run the PayItem Utility V1 or V2 on items not placed by Geopak Drainage after running SOAP, you will have to rerun SOAP because the Station and Offsets will be gone.
4. Run the Drainage Summary Sheet VBA (PADSS).
5. Open and review the resulting Excel spreadsheet to insure "normal" items were not placed in the "Dump" column. Address issues as necessary.

Station and Offset VBA (SOAP)

The Station and Offset VBA (SOAP) prompts for alignment and structure number. With this information, SOAP determines the respective station and offset. The information gathered by SOAP (structure number, alignment, station, and offset) is eventually passed to an Excel spreadsheet by another VBA (PADSS).

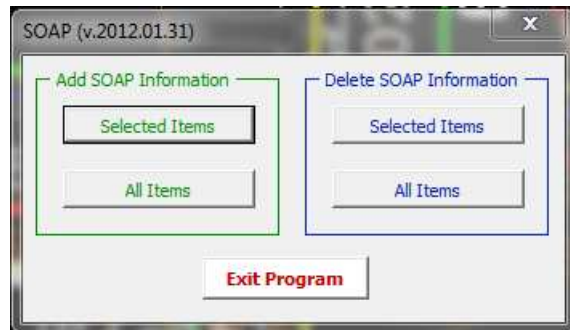
SOAP does not prompt for the structure numbers for pipe removal or flowable fill, but it does need the alignments for these features.

Steps

1. While in the drainage (drn) file, attach the first plan sheet file.

2. Either power select the whole sheet or the individual items.
3. Launch the Station and Offset VBA (SOAP).

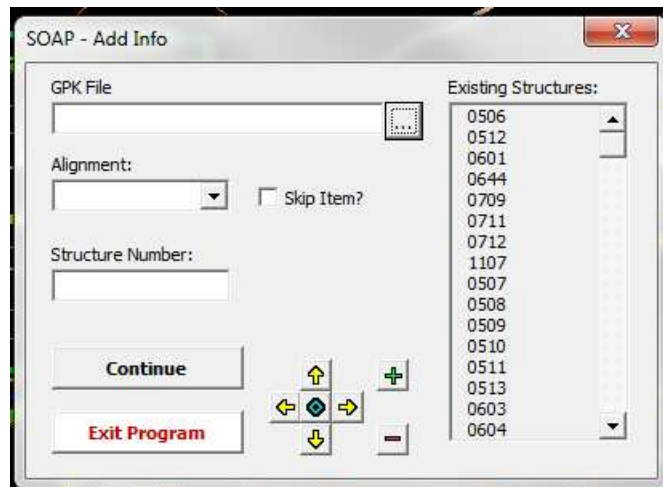
If this is the first time SOAP has ever been run for this project, then simply select the button labeled “Selected Items” on the left side of the SOAP dialog box. (The left side of the dialog box is titled “Add SOAP Information”).



If SOAP has previously been run on this project, then select the button labeled “Selected Items” on the right side of the SOAP dialog box. (The right side of the dialog box is titled “Delete SOAP Information”. The deletion clears feature adhoc values associated with previous runs of SOAP. Once the deletion process has finished, select the button labeled “Selected Items” on the left side of the SOAP dialog box. (The left side of the dialog box is titled “Add SOAP Information”).

4. The “SOAP – Add Info” dialog box opens. In this dialog box, select the GPK file and alignment for a given structure. Then enter the related structure number. Click the “Continue” button. Repeat the cycle for all relevant structures.

(Note that structure numbers are displayed in the left portion of the dialog box, but that they are only partially sorted.)



5. When you finish the first plan sheet, you must exit SOAP before continuing with the next sheet. After exiting SOAP, detach the completed plan sheet file and attach the next plan sheet file. Repeat the process for all necessary plan sheet files.

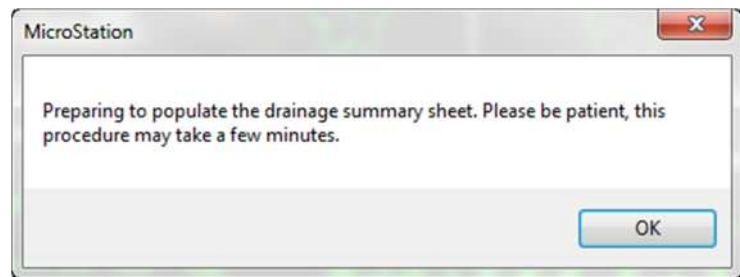
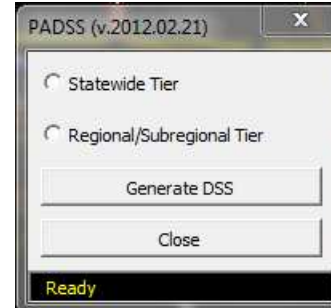
When you finish running SOAP on all of the plan sheet files, it is time to use another program, PADSS, to populate the Drainage Summary Sheet.

Drainage Summary Sheet VBA (PADSS)

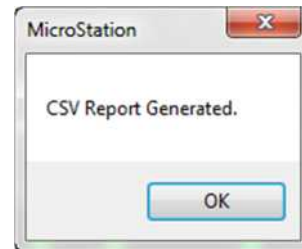
Warning: you must **not** have Excel open when you run PADSS.

Steps

1. Launch PADSS by selecting **Geopak Drainage Tools > Drainage Summary Sheet** from the custom Hydraulics tools.
2. In the PADSS dialog box, select the appropriate Tier option for the project.
3. Select the “Generate DSS” button and then be patient.
4. When the “MicroStation” advisory dialog box opens, select OK, and again be patient.



5. When the second “MicroStation” dialog box opens, advising that the report has been generated, select OK.



The report is an Excel spreadsheet file. PADSS automatically saves this file in the project’s Drainage folder, with a name of the format:

tipnumber_yyyymmdd_DSS.xlsm

Open the Excel file. On the **Home** worksheet, fill in any relevant fields. Then go to the **48orLess** worksheet. Review items in the Dump column to insure that no “normal” items are present. Address issues as necessary.

Responsibilities of the Hydro User

Run Geopak Drainage.

Run the PayItem Utility.

At some point, not yet determined

Run Station and Offset VBA (SOAP).

Run Drainage Summary Sheet VBA (PADSS)

SOAP and PADSS are not dynamically linked to Geopak Drainage or the drainage design file. Therefore, after you run these applications, if you alter the drainage in the file, if you change a system, if you add a driveway pipe you have to run the VBA's again. If you place a driveway pipe, use the application under Hydraulic's Geopak Drainage Tools called "Edit Payitem". (Before you run it, you need to power select the "NON GEOPAK DRAINAGE" features that you have added.) If you added something to a Geopak drainage system, then run that system in the Payitem utility.